EXHIBIT 1

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN FRANCISCO DIVISION

WAYMO LLC,

Plaintiff,

vs. Case No.

UBER TECHNOLOGIES, INC.; 3:17-cv-00939-WHA

OTTOMOTTO LLC; OTTO TRUCKING LLC,

Defendants.

_____/

HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY

VIDEOTAPED DEPOSITION OF ANDREW WOLFE, Ph.D.

FRIDAY, AUGUST 11, 2017

Reported by:

Anrae Wimberley

CSR No. 7778

Job No. 2678828

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qualitatively or generally quantitatively what happens. Without numbers on it, you can't really -- you can get ratios between things, but they're arbitrary points on the curve. So I don't know what that would mean to anybody. 10:36:16 10:36:19 10:36:24 10:36:30 10:36:32

BY MS. YANG: 10:36:32

Q. As shown in your own figure, when you say the current flow is restricted in paragraph 52, how much flow is getting through the diode in the example of paragraph 52? 10:36:34 10:36:40 10:36:45 10:36:46

A. It would vary from diode to diode, but it's generally several orders of magnitude less than the maximum forward current of the diode. 10:36:50 10:36:53 10:36:56

Q. So going to Column 18 of the patent, at lines 62 to 67 -- and this is Figure 5B in your own declaration, matching up against this. So let's just walk through that again. 10:37:54 10:38:12 10:38:15 10:38:16

MS. YANG: I'm looking at Figure -- so just to clear up for the record, I'm looking at Columns 18, lines 62 to 67, of the '936 patent, which is Exhibit 1425. And I'm looking at Figure 5B of the patent, which is replicated in paragraph 65 of Dr. Wolfe's declaration on page 22. 10:38:22 10:38:26 10:38:31 10:38:35 10:38:39 10:38:41

THE WITNESS: I'm sorry. You wanted me to look at paragraph . . . okay. Okay. 10:38:44 10:38:51

BY MS. YANG: 10:38:51

Q. The specification states, "Upon the diode 514 being reverse biased, the current through the inductor 510 goes to zero and the voltage across the inductor 510 settles at zero, which sets node A to the voltage of the voltage source 502 (e.g., the voltage V1), but the capacitor may hold a higher voltage (e.g., about 2 V1)." 10:38:53 10:38:56 10:39:01 10:39:07 10:39:11 10:39:16 10:39:17

So matching that up against the curves shown in Figure 5B, when the diode is reversed by T2, the current through inductor 510, which is shown by the curve IInd, it goes to zero; is that correct? 10:39:22 10:39:28 10:39:32 10:39:36

A. For this particular embodiment in this particular example, that's true. 10:39:38 10:39:40

Q. And so in the '936 patent, it's describing -- the '936 patent is describing an idealized diode, is that correct, where there's no reverse current described in the Figure 5B or in the specification; is that true? 10:39:44 10:39:50 10:39:54 10:39:59 10:40:01

MR. NEWTON: Objection; form. 10:40:39

THE WITNESS: It's not clear. I guess theoretically it's idealized, but what it's really showing here is that the voltage at node A and the voltage at the other side of the diode at this particular period of time are so close, that there's 10:40:50 10:40:55 10:40:58 10:41:02 10:41:10

very, very little difference between them. So when it tells us that it's reverse biased -- if, for example, we were to look at the figure that I have on page 18, it's telling us here that it's just a tiny bit to the left of the axis line into the blue region. So if we were to be hypertechnical about it, there would be a very, very small reverse current, but it's right up against the point where it would be zero. So -- 10:41:12 10:41:15 10:41:22 10:41:28 10:41:34 10:41:38 10:41:40 10:41:51 10:41:54 10:41:57

BY MS. YANG:

Q. Well -- 10:41:58

A. The words "reverse biased" tell us that it exists, but we're right up against the null point in that particular situation that's being described there. So the current is about close to zero as anybody would care about. 10:42:01 10:42:06 10:42:09 10:42:12 10:42:14

Q. And earlier today, an hour ago, we talked about the curve IInd in Figure 5B. And at least as illustrated in Figure 5B, the curve at T2 goes to zero and stays at zero until at least about the point TRx in this figure; is that correct? 10:42:18 10:42:22 10:42:28 10:42:33 10:42:36

MR. NEWTON: Objection; form. 10:42:50

THE WITNESS: Yeah, at least close enough to zero that nobody would care about it. It would not stay at 10:42:52 10:42:55

Exhibit 1428. 11:23:37

THE REPORTER: Our next exhibit is 1429. 11:24:02

(Defendants' Exhibit 1429 was marked.) 11:24:20

MS. YANG: Can we go off the record. 11:24:21

THE VIDEOGRAPHER: We are off the record at 11:24 a.m. 11:24:23

(Recess taken.) 11:37:45

THE VIDEOGRAPHER: We are back on the record at 11:40 a.m. 11:40:32

BY MS. YANG: 11:40:34

Q. I need to do a little bit of just recapping. So if we can go back to Figure 5A of the patent as well as Claim 1. And maybe the best way to do that is to look at Claim 1 of the patent, which is -- 11:40:40

A. I have two copies, so I'm fine. 11:40:54

Q. You have it. Okay. Fantastic. 11:40:56

Just to clarify for the record, Claim 1 of the patent, which is Exhibit 1425. And also looking at Figure 5 at the same time. And I too have two copies of the patent. 11:40:59

What is the charging path of the '936 patent, in your opinion? 11:41:27

MR. NEWTON: I'll object. This is outside the scope. Dr. Wolfe didn't offer an opinion on this term. These questions are improper. 11:41:32

BY MS. YANG: 11:41:38

Q. Is there any reason you didn't offer an opinion on the charging path claim limitation? 11:41:42 11:41:45

A. Counsel never asked me to. 11:41:48

Q. Understood. 11:41:48

Just so . . . just to recap then, the claim -- earlier today we talked about the inductor being 510, element 510 in circuit 5A; is that correct? 11:42:05 11:42:08 11:42:14

A. In that one particular example, element 510 is an inductor. 11:42:19 11:42:20

Q. And then there is a diode coupled to the voltage source via the inductor. 11:42:25 11:42:27

So the diode is 514; is that correct? 11:42:30

A. In that example embodiment, 514 would be an example of a diode that could meet that claim language in Claim 1. 11:42:36 11:42:39 11:42:40

Q. When you say via the inductor, does the claim require the inductor 510 to be between 514 and 502? 11:42:45 11:42:52

MR. NEWTON: Same objection. It's outside the scope of Dr. Wolfe's claim construction opinions. 11:42:53 11:42:56

THE WITNESS: Can I hear the question again. 11:42:59

BY MS. YANG: 11:42:59

Q. I'm just asking what the charging path is here. 11:43:01 11:43:01

So is the inductor -- when the claim language 11:43:06

here. 12:24:30

When you describe in your declaration, 12:24:36

paragraph 44, that "the diode 414 becomes reverse 12:24:39

biased to block the current flow," you mean that in 12:24:42

sort of the ideal physics -- law of physics 12:24:45

theoretical sense, correct, that the flow is blocked, 12:24:49

obviously there's some small -- orders of magnitude 12:24:53

smaller reverse current, but the flow overall is 12:24:58

blocked at -- when the diode is reverse biased; is 12:25:01

that correct? 12:25:03

A. No. I mean what I explained before. Because 12:25:03

the voltage is very low that, for a practical sense, 12:25:08

it's blocked. That's the patentee's language, not 12:25:11

mine. I'm just repeating it. But that's what 12:25:15

"blocked" means in that sense, is that it's reverse 12:25:17

biased because we're near the zero point and there's 12:25:22

little or no current that's flowing. 12:25:25

Q. Finally, returning to paragraph 52 of 12:25:41

your -- turning to paragraph 52 of your declaration, 12:25:46

just to be clear, you use the words "the diode becomes 12:25:50

'reversed biased' and restricts the current flow in 12:25:53

the opposite direction." 12:25:54

You don't use the word "resists" the current 12:25:58

flow; is that correct? 12:25:58

A. It's true that I didn't use that word, but as 12:26:01

FEDERAL CERTIFICATE OF DEPOSITION OFFICER

I, ANRAE WIMBERLEY, CSR NO. 7778, do hereby declare:

That, prior to being examined, the witness named in the foregoing deposition was by me duly sworn pursuant to Section 30(f)(1) of the Federal Rules of Civil Procedure and the deposition is a true record of the testimony given by the witness;

That said deposition was taken down by me in shorthand at the time and place therein named and thereafter reduced to text under my direction;

----- That the witness was requested to review the transcript and make any changes to the transcript as a result of that review pursuant to Section 30(e) of the Federal Rules of Civil Procedure;

----- No changes have been provided by the witness during the period allowed;

----- The changes made by the witness are appended to the transcript;

----- No request was made that the transcript be reviewed pursuant to Section 30(e) of the Federal Rules of Civil Procedure.

I further declare that I have no interest in the event of the action.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

WITNESS my hand this 14th day of August, 2017.

Anrae Wimberley

ANRAE WIMBERLEY, CSR NO. 7778